

IN THE CLAIMS

Claims 1-45 (Canceled).

- 2 ~~46~~. (Previously Presented) A vector comprising the nucleic acid of Claim ~~50~~ ¹.
- 3 ~~47~~. (Previously Presented) A host cell comprising the vector of Claim ~~46~~ ².
- 4 ~~48~~. (Previously Presented) A method of producing an agonist antibody comprising culturing the host cell of Claim ~~47~~ ³ under conditions wherein the nucleic acid is expressed.
- 5 ~~49~~. (Currently Amended) An isolated nucleic acid encoding an agonist antibody, fragment or variant thereof which binds to human c-mpl, wherein said agonist antibody, fragment, or variant thereof is selected from the group consisting of 12E10 (SEQ ID NO:77) (~~SEQ ID NO:79~~), 12B5 (SEQ ID NO:75) (~~SEQ ID NO:77~~), 10F6 (SEQ ID NO:72) (~~SEQ ID NO:74~~) and 12D5 (SEQ ID NO:76) (~~SEQ ID NO:78~~).
- 1 ~~50~~. (Previously Presented) An isolated nucleic acid encoding an agonist antibody, fragment or variant thereof which binds to human c-mpl, wherein said antibody, fragment or variant thereof is selected from the group consisting of: Ab1, Ab2, Ab3, Ab4, Ab5 and Ab6, wherein each Ab1-Ab6 comprises a VH and VL chain, each VH and VL chain comprising CDR amino acid sequences designated CDR1, CDR2 and CDR3 separated by framework amino acid sequences, the amino acid sequence of each CDR in each VH and VL chain of Ab1-Ab6 is selected according to the following table:

Ab1:	VH^{CDR1}	VH^{CDR2}	VH^{CDR3}
	(SEQ ID NO: 1)	(SEQ ID NO: 3)	(SEQ ID NO: 5)
	(SEQ ID NO: 2)	(SEQ ID NO: 4)	(SEQ ID NO: 6)
	VL^{CDR1}	VL^{CDR2}	VL^{CDR3}
	(SEQ ID NO: 7)	(SEQ ID NO: 9)	(SEQ ID NO: 11)
	(SEQ ID NO: 8)	(SEQ ID NO: 10)	(SEQ ID NO: 12)

Ab2:	VH^{CDR1}	VH^{CDR2}	VH^{CDR3}
	(SEQ ID NO: 13)	(SEQ ID NO: 15)	(SEQ ID NO: 17)
	(SEQ ID NO: 14)	(SEQ ID NO: 16)	(SEQ ID NO: 18)
	VL^{CDR1}	VL^{CDR2}	VL^{CDR3}
	(SEQ ID NO: 19)	(SEQ ID NO: 21)	(SEQ ID NO: 23)
	(SEQ ID NO: 20)	(SEQ ID NO: 22)	(SEQ ID NO: 24)
Ab3:	VH^{CDR1}	VH^{CDR2}	VH^{CDR3}
	(SEQ ID NO: 25)	(SEQ ID NO: 27)	(SEQ ID NO: 29)
	(SEQ ID NO: 26)	(SEQ ID NO: 28)	(SEQ ID NO: 30)
	VL^{CDR1}	VL^{CDR2}	VL^{CDR3}
	(SEQ ID NO: 19)	(SEQ ID NO: 21)	(SEQ ID NO: 23)
	(SEQ ID NO: 20)	(SEQ ID NO: 22)	(SEQ ID NO: 24)
Ab4:	VH^{CDR1}	VH^{CDR2}	VH^{CDR3}
	(SEQ ID NO: 25)	(SEQ ID NO: 31)	(SEQ ID NO: 33)
	(SEQ ID NO: 26)	(SEQ ID NO: 32)	(SEQ ID NO: 34)
	VL^{CDR1}	VL^{CDR2}	VL^{CDR3}
	(SEQ ID NO: 35)	(SEQ ID NO: 21)	(SEQ ID NO: 23)
	(SEQ ID NO: 20)	(SEQ ID NO: 22)	(SEQ ID NO: 24)
Ab5:	VH^{CDR1}	VH^{CDR2}	VH^{CDR3}
	(SEQ ID NO: 36)	(SEQ ID NO: 38)	(SEQ ID NO: 40)
	(SEQ ID NO: 37)	(SEQ ID NO: 39)	(SEQ ID NO: 41)
	VL^{CDR1}	VL^{CDR2}	VL^{CDR3}
	(SEQ ID NO: 19)	(SEQ ID NO: 21)	(SEQ ID NO: 23)
	(SEQ ID NO: 20)	(SEQ ID NO: 22)	(SEQ ID NO: 24)
Ab6:	VH^{CDR1}	VH^{CDR2}	VH^{CDR3}
	(SEQ ID NO: 42)	(SEQ ID NO: 44)	(SEQ ID NO: 46)
	(SEQ ID NO: 43)	(SEQ ID NO: 45)	(SEQ ID NO: 47)

VL ^{CDR1}	VL ^{CDR2}	VL ^{CDR3}
(SEQ ID NO: 48)	(SEQ ID NO: 50)	(SEQ ID NO: 52)
(SEQ ID NO: 49)	(SEQ ID NO: 51)	(SEQ ID NO: 53).

6 ~~51~~. (Previously Presented) The isolated nucleic acid of Claim ~~50~~¹, wherein said agonist antibody, fragment, or variant thereof is a humanized antibody, fragment or variant thereof.

7 ~~52~~. (Previously Presented) The isolated nucleic acid of Claim ~~50~~¹, wherein said agonist antibody, fragment, or variant thereof is a non-naturally occurring antibody, fragment or variant thereof.

8 ~~53~~. (Previously Presented) The isolated nucleic acid of Claim ~~50~~¹, wherein said agonist antibody, fragment, or variant thereof is a human antibody, fragment or variant thereof.

9 ~~54~~. (Previously Presented) The isolated nucleic acid of Claim ~~50~~¹, wherein said agonist antibody stimulates proliferation, differentiation or growth of megakaryocytes.

10 ~~55~~. (Previously Presented) The isolated nucleic acid of Claim ~~50~~¹, wherein said agonist antibody stimulates megakaryocytes to produce platelets.

11 ~~56~~. (Previously Presented) The antibody of Claim ~~50~~¹, wherein said agonist antibody is selected from the group consisting of svFv, Fab, F(ab')₂ and IgG.

12 ~~57~~. (Previously Presented) The antibody of Claim ~~50~~¹, wherein said agonist antibody is a monoclonal antibody.